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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,456	02/12/2004	James M. Cullen	82126	2299

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KRIEGSMAN & KRIEGSMAN
30 TURNPIKE ROAD, SUITE 9
SOUTHBOROUGH, MA 01772

EXAMINER	
LIEU, JULIE BICHNGOC	
ART UNIT	PAPER NUMBER
2612	
MAIL DATE	DELIVERY MODE
09/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/777,456	CULLEN ET AL.	
	Examiner	Art Unit	
	Julie Lieu	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-28 and 34-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11, 16-18, 20-28, 34, 35, 37,-40, 44, 45, 47-49, 53, 54* is/are rejected.

7)☒ Claim(s) *13,19,36,41-43,46 and 50-52* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in response to Applicant's afterfinal amendment filed July 09, 2008. claims 1-10 and 29-33 have been canceled.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 11, 16-18, 20-28, 34, 35, 37-40, 44, 45, 47-49, and 53 and are again rejected under 35 U.S.C. 103(a) as being unpatentable over Grabau et al. (US Patent No. 6,451,154) in view of Nowaczyk (US Patent No. 6,096,153).

As to claim 11, Grabau teaches a tag comprising:

an inlay 15 (fig. 3) comprising:

i. a carrier sheet 12,

ii. an antenna 15B, and

iii. a wireless communication device 15A.

Grabau fails to disclose top and bottom plastic extrudates with a cavity to housing receive the inlay 15. However, Nowaczyk teaches a tag including:

a. a top plastic extrudate member 46 and

b. a bottom plastic extrudate member 32 (see fig. 2), the bottom plastic extrudate member being shaped to include a cavity 28 adapted to received a resonant circuit 30 of a tag, wherein the top and the bottom plastic extrudate member cooperatively encapsulate the tag circuit.

In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art provide a housing cavity as that disclosed in Nowaczyk to house inlay 15 of Grabau because such housing would provide protection for inlay 15 than the face cover 14. Nowaczyk discloses a tag comprising

Though the figure dictates that cavity 28 is form in the top extrudate, it should be noted that the Nowaczyk casing when flipped around would become the bottom extrudate. The terms "top" and "bottom" are only relative and would be interpreted accordingly.

As to claim 16, Grabau teaches a tag comprising:

a. an inlay comprising:

i. a carrier sheet 12,

ii. an antenna 15B, and

iii. a wireless communication device 15A.

Grabau fails to disclose a casing for the inlet 12. However, Nowaczyk teaches a tag including:

b. a plastic casing comprising:

i. a bottom member 28 shaped to define a longitudinal cavity (fig. 2 or 3)

ii. a top member 32 applied to the bottom member 46 to at least partially enclose the longitudinal cavity for a tag circuit.

In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art provide a housing cavity as that disclosed in Nowaczyk to house inlay 15 of Grabau because such housing would provide protection for inlay 15 than the face cover 14.

Though the figure dictates that cavity 28 is form in the top extrudate, it should be noted that the Nowaczyk casing when flipped around would become the bottom extrudate. The terms "top" and "bottom" are only relative and would be interpreted relatively.

As to claim 17, in Grabau, the wireless communication device is a radio frequency (RF) communication device.

As to claim 18, the antenna in the combined system of Grabau and Nowaczyk is inherently printed onto the carrier sheet.

As to claim 20, the plastic casing of the combined device of Grabau and Nowaczyk comprises a mounting adhesive 50 coupled to the plastic casing (see fig. 3 or Nowaczyk).

As to claim 21, the wireless communication device in the combined device is in the form of an integrated circuit (IC) chip 15A which is conductively bonded to antenna 15B (fig. 3 of Grabau).

As to claim 22, though neither Grabau nor Nowaczyk discloses that the antenna used in the combined system is a bilaterally symmetrical dipole antenna, the use of a dipole antenna in an RFID tag is very conventional in the art and further a dipole antenna is inherently bilaterally symmetrical. Therefore, it would have been obvious to one skilled in the art to use a bilaterally symmetrical dipole antenna in the combined device because it is conventional.

As to claim 23, one skilled in the art would have readily recognized placing the inlets in Grabau along the longitudinal cavity of housing 28 in Nowaczyk. It follows then that one skilled

in the art would have readily recognized using the correct-sized housing for the RFID tag of Grabau, thus, the RIFD tag would extend the entire length of the bottom member 46 because it is not necessary to make the housing much larger than the RFID device to waste the material.

As to claim 24, referring to fig. 5 of Nowaczyk, the longitudinal cavity is generally U-shaped in longitudinal cross-section.

As to claim 25, the top member 46 is a flat sheet affixed to the bottom member 28.

As to claim 26, Grabau discloses a tag comprising:

Grabau teaches a tag comprising:

a. an inlay comprising:

i. a carrier sheet 12,

ii. an antenna 15B, and

iii. a wireless communication device 15A couple to antenna 15B. see fig. 3.

Grabau fails to disclose a casing for the inlet 12. However, Nowaczyk teaches a tag including:

b. a plastic casing comprising:

i. a bottom member 28 shaped to define a longitudinal cavity (fig. 2 or 3)

ii. a top member 42 applied to the bottom member 46 to at least partially enclose the longitudinal cavity for a tag circuit, wherein the top member is a plug molded to the bottom member, that is, the top member is a cover to enclose the housing.

In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art provide a housing cavity as that disclosed in Nowaczyk to house inlay 15 of Grabau because such housing would provide protection for inlay 15 than the face cover 14.

Though the figure dictates that cavity 28 is form in the top extrudate, it should be noted that the Nowaczyk casing when flipped around would become the bottom extrudate. The terms "top" and "bottom" are only relative and would be interpreted relatively.

As to claim 27, in Nowaczyk's device, the longitudinal cavity extends only a portion of the length of the bottom member. See fig. 2 or 3.

As to claim 28, referring to figure 2 of Nowaczyk's the longitudinal cavity is spaced inwardly from both ends of the bottom member 42.

As to claim 34, Grabau discloses a method of continuously manufacturing a plurality of tags, comprising the steps of:

a. providing a single continuous strip

b. depositing a continuous supply of inlays into the continuous strip,

c. the continuous supply of inlays comprising a carrier web, a plurality of antennae 15B disposed on the carrier web at spaced intervals (fig. 7), and a wireless communication device 15A coupled to each of the antennae (fig. 3),

c. applying a cover 14 over the continuous supply of inlays (fig. 3)

d. cutting the continuous supply of inlays and the single continuous strip between successive antennae to yield individual tag (this is inherent because each of RFID devices is for use on separate item or individual).

Though the cover 14 appears to be individually deposited on each inlay, it would have been obvious to one of ordinary skill in the art to use a continuous sheet because they are functionally equivalent as to provide a cover for the inlays.

Grabau fails to disclose a casing for the inlet 12. However, Nowaczyk teaches a tag including a plastic casing comprising a longitudinal cavity (fig. 2 or 3). In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art provide a housing cavity as that disclosed in Nowaczyk to house inlay 15 of Grabau because such housing would provide protection for inlay 15 than the face cover 14. It would follow then that the cover 14 of Grabau would be replaced by cover 42 in the casing of Nowaczyk's.

As to claim 35, though not disclose in Grabau or Nowaczyk, one skilled in the art would have readily recognized that cutting the strip of tags to separate them, it would be desirable to insure that the RFID device is secured within the casing. Nowaczyk casing is made to secure the tag; however, it would have been obvious to one skilled in the art to crimp the strip between successive antennae so the RIFD device is further secured.

As to claim 37, this claimed feature is inherent in the combined system since the RFID tag must be complete before cutting or separation of the tags.

As to claim 38, cover 14 in Grabau comprises a fiat sheet affixed to the ingle continuous strip.

As to claim 39, at least one of the flat sheet and the single continuous strip are formed by extrusion molding.

As to claim 40, cover 42 comprises a plug molded onto said single continuous strip.

As to claim 44, Grabau discloses a method of continuously manufacturing a plurality of tags, comprising the steps of:

a. providing a single continuous strip

b. depositing a continuous supply of inlays into the continuous strip, each inlay comprising a carrier sheet 12, an antenna 15B disposed on the carrier sheet, and a wireless communication 15A;

c. the continuous supply of inlays comprising a carrier web, a plurality of antennae 15B disposed on the carrier web at spaced intervals (fig. 7), and a wireless communication device 15A coupled to each of the antennae (fig. 3),

c. applying a cover 14 over the continuous supply of inlays (fig. 3)

d. cutting the continuous supply of inlays and the single continuous strip between successive antennae to yield individual tag (this is inherent because each of RFID devices is for use on separate item or individual).

Though the cover 14 appears to be individually deposited on each inlay, it would have been obvious to one of ordinary skill in the art to use a continuous sheet because they are functionally equivalent as to provide a cover for the inlays.

Grabau fails to disclose a casing for the inlet 12. However, Nowaczyk teaches a tag including a plastic casing comprising a longitudinal cavity (fig. 2 or 3). In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art provide a housing cavity as that disclosed in Nowaczyk to house inlay 15 of Grabau because such housing would provide protection for inlay 15 than the face cover 14. It would follow then that the cover 14 of Grabau would be replaced by cover 42 in the casing of Nowaczyk's.

As to claim 45, though not disclosed in Grabau or Nowaczyk, one skilled in the art would have readily recognized that cutting the strip of tags to separate them, it would be desirable to insure that the RFID device is secured within the casing. Nowaczyk casing is made

to secure the tag; however, it would have been obvious to one skilled in the art to crimp the strip between successive antennae so the RIFD device is further secured.

As to claim 47, the method in the combined system of Grabau and Nowaczyk includes coupling a mounting adhesive 50 (fig. 2 in Nowaczyk) to the continuous strip.

As to claim 48, the single strip in the combined system of Grabau and Nowaczyk's inherently is formed by extruding a sheet of material and then forming cavities in said sheet of material by thermoforming and wherein said single continuous web is formed by extrusion molding.

As to claim 49, Grabau discloses a method of continuously manufacturing a plurality of tags, comprising the steps of:

a. providing a single continuous member 32,

b. depositing a continuous supply of inlays into the continuous member, each inlay comprising a carrier sheet 12, an antenna 15B disposed on the carrier sheet, and a wireless communication 15A;

c. the continuous supply of inlays comprising a carrier web, a plurality of antennae 15B disposed on the carrier web at spaced intervals (fig. 7), and a wireless communication device 15A coupled to each of the antennae (fig. 3),

c. applying a plug 14 over the continuous supply of inlays (fig. 3)

d. cutting the continuous supply of inlays and the single continuous strip between successive cavities to yield individual tag (this is inherent because each of RFID devices is for use on separate item or individual).

Though the cover 14 appears to be individually deposited on each inlay, it would have been obvious to one of ordinary skill in the art to use a continuous sheet because they are functionally equivalent as to provide a cover for the inlays.

Grabau fails to disclose a casing for the inlet 12. However, Nowaczyk teaches a tag including a plastic casing comprising a longitudinal cavity (fig. 2 or 3). In light of Nowaczyk's teaching, it would have been obvious to one skilled in the art provide a housing cavity as that disclosed in Nowaczyk to house inlay 15 of Grabau because such housing would provide protection for inlay 15 than the face cover 14. It would follow then that the cover 14 of Grabau would be replaced by cover 42 in the casing of Nowaczyk's.

As to claim 53, it is inherent that the single continuous strip in Grabau and Nowaczyk is formed by extruding a sheet of material and then forming cavities in the sheet of material by thermoforming.

As to claim 54, this claimed feature is inherent in the combined system since the RFID tag must be complete before cutting or separation of the tags.

4. Claims 12, 14 and 15 and are again rejected under 35 U.S.C. 103(a) as being unpatentable over Grabau et al. (US Patent No. 6,451,154).

As to claim 12, Grabau discloses a method of continuously manufacturing a plurality of tags, the method comprising the steps of:

providing a continuous supply of inlays (figs 1 and 4), continuous supply of inlays comprising a continuous carrier web (col. 5, lines 39-48), a plurality of antennae 15B positioned

on the continuous carrier web at spaced intervals and a wireless communication device coupled to each of the antennae,

feeding said continuous supply of inlays into an extruder (fig. 1) so as to yield a continuous block which includes the continuous supply of inlays surrounded by a plastic extrudate, and

cutting the continuous block between successive antennae so as to yield individual tags, this step is inherent because each tag is to use separately on a different item or individual.

Though Grabau fails to disclose a cross-head extruder, it would have been obvious to one skilled in the art to use a cross-head extruder in the Grabau extruding system because it is conventional in the art for applying layers of material on a web.

As to claim 14, one of ordinary skill would have readily recognized that cooling step must done only after the feeding step because the inlets must be formed before any other steps to be taken, and to wait for the continuous block to cool before cutting the continuous block into individual tag.

As to claim 15, Grabau discloses the step of coupling a mounting adhesive 49 to the underside of the continuous block. See fig. 3.

Allowable Subject Matter

5. Claims 13, 19, 36, 41-43, 46, and 50-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Julie Lieu/
Primary Examiner
Art Unit 2612

Sept 24, 08